

**ABSTRACT**

A process assessment tool and a process assessment method are disclosed to allow a design of a manufacturing process to reduce environmental loads. The process assessment tool comprises: a data  
5 input unit having a section data input, a step data input, and a consumed material input; a data processing unit connected to an electric power environmental load database, a fossil fuel environmental database, and a material environmental database; and a display unit providing a cumulative graph, a pie graph, and a radar chart. Environmental loads  
10 including energy consumption, carbon dioxide, sulfur oxides, nitrogen oxides and others are calculated with data entered at the data input unit and data from the databases connected to the data processing unit. Displaying the calculation in a visual form at the display unit provides the design of the manufacturing process with the useful information, and  
15 allows the design to reduce environmental loads of the manufacturing process.